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## PATENT ABSTRACTS OF JAPAN

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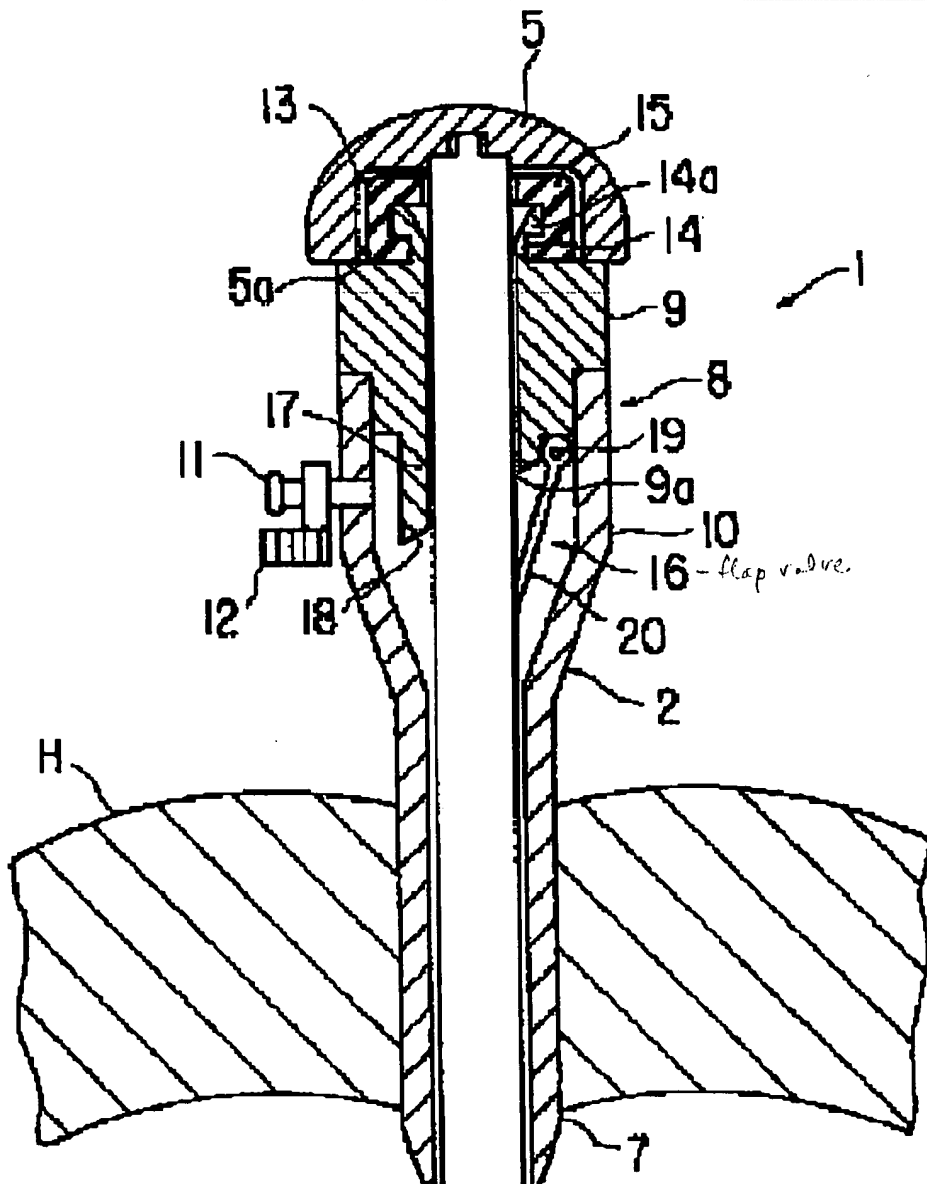
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## (54) TROCAR

(57) Abstract:

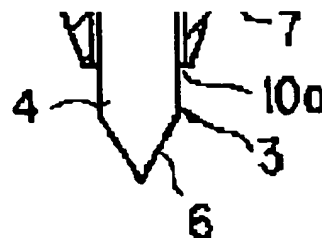
**PROBLEM TO BE SOLVED:** To maintain excellent hermeticity at the time of valve closing in spite of repetitive use and to improve washability by providing at least a part of a trocar component element with a magnet and attracting the closure body of a valve means for openably and closably closing the inside of a mantle pipe by the magnetic force of the magneto, thereby closing the insertion hole of the mantle pipe.

**SOLUTION:** The trocar 1 consisting of the mantle pipe 2 and an inner needle 3 to be insertably and removably inserted into the mantle pipe 2 is connected with a handle part 5 on an operator side to an elongated inner needle body 4 of the inner needle 3. The mantle pipe 2 is provided with an elongated insertion part 7 to be inserted to the patient's body wall and a mantle pipe handle part 8 on the operator side. The mantle pipe 2 is vertically bisected and is formed of respective insertion route component members 9, 10 on an inlet side and an outlet side and is internally provided with a flap valve 16 opened and closed at the time of putting an endoscope, or the like, into or out of these members. A valve plug 20 as the closure body is energized in a closing



direction around a turning shaft 19 by the magnetic force of the insertion route component member 9 consisting of the magnet and is seated to a valve seat 18.

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